



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/648,282

08/27/2003

Gene G. Faison JR.

033018-137

4444

21839 7590 02/27/2007  
BUCHANAN, INGERSOLL & ROONEY PC  
POST OFFICE BOX 1404  
ALEXANDRIA, VA 22313-1404

EXAMINER

LOPEZ, AMADEUS SEBASTIAN

ART UNIT

PAPER NUMBER

3771

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
--	-----------	---------------

3 MONTHS

02/27/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/648,282	FAISON ET AL.	
	Examiner	Art Unit	
	Amadeus S. Lopez	3771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-17 and 24-28 is/are allowed.
- 6) ☒ Claim(s) 18, 21 and 22 is/are rejected.
- 7) ☒ Claim(s) 19, 20 and 23 is/are objected to.
- 8) ☒ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/02/04, 1/18/05, 12/05/03</u>                                | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments, see response to election/restriction, filed 11/13/2006, with respect to the restriction requirement have been fully considered and are persuasive.

The restriction requirement of claims 1-28 has been withdrawn.

### ***Information Disclosure Statement***

The examiner has considered all references disclosed within the Information Disclosure Statements filed on 4/02/2004 and 1/18/2005. One of the references listed on the Information Disclosure Statement filed on 12/05/2003 has not been considered since the proper US patent number was not disclosed.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Art Unit: 3771

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 18, 20, and 21 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-5 of U.S. Patent No. 6640050. Although the conflicting claims are not identical, they are not patentably distinct from each other because all of the structural limitations of claims 18, 20, and 21 of the instant application can be found within claims 1-5 of US Patent 6640050 ('050).

As to claim 18, claims 1-3 of ('050) disclose a fluid vaporizing device for delivery of vaporized fluid, comprising: a resistively heated capillary tube including an inlet and an outlet, the capillary tube being of material having a resistance  $R_c$ ; a first electrode connected to the capillary tube; and a second electrode connected to the capillary tube closer to the outlet of the capillary tube than the first electrode, the second electrode having a resistance wherein the vaporized fluid is generated by passing electrical current through a section of the capillary tube between the first and second electrodes while supplying liquid to the inlet of the capillary tube, the liquid being heated in the capillary tube and forming the vaporized fluid downstream of a meniscus at which liquid passing through the capillary tube is converted to vapor, the fluid vaporizing device having a total hot resistance  $R_t = R_c + R_e$  (it is inherent that both the capillary tube and second electrode will have resistance and when added up will sum to a total hot resistance) during delivery of the vaporized fluid, wherein  $R_t$  has a preset value effective to provide the meniscus spaced from the outlet by a predetermined distance (it is inherent that the total hot resistance  $R_t$  will correspond to a predetermined preset value

Art Unit: 3771

effective to provide the meniscus spaced from the outlet by a predetermined distance depending on what materials are used for the capillary tube and the second electrode that have a resistance that will sum to a preset value that corresponds to such a predetermined distance).

What is not disclosed by the claims of US patent '050 is the second electrode having a resistance  $R_e$  which increases as the second electrode is heated resistance  $R_c$  which increases as the capillary tube is heated. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the capillary tube and second electrode to have a heated resistance which increases as the capillary tube and electrode are heated because this would prevent excessive heating of the tube and electrode and control the temperature of the vapor that will be delivered to a user of the device so that they may not burn their upper respiratory tract.

As to claim 21, claim 4 of '050 discloses a fluid vaporizing device further comprising a mouthpiece, the outlet of the capillary tube directing vaporized fluid into the mouthpiece.

As to claim 22, claim 5 of '050 discloses a fluid vaporizing device further comprising: a controller; and a sensor; wherein the sensor detects a delivery condition corresponding to delivery of a predetermined volume of aerosol, the controller being operable to effect delivery of medicament-containing liquid to the capillary tube when the delivery condition is sensed by the sensor and effect passage of electrical current through the capillary tube to volatilize the liquid in the capillary tube.

***Allowable Subject Matter***

Claims 1-17 and 24-28 are allowed.

Claims 19, 20, and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

1. The prior art made of record and not relied upon is considered pertinent to the applicant's disclosure to show vaporizers with capillary tubes and similar heating means. US 7147170, US 2004/0265519, US 5523226, US 6684879, US 6501052, US 6568390, US 795330, US 6772757, US 5743251, US 6491233, US 6491233, and US 2004/0025865.

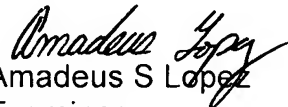
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amadeus S. Lopez whose telephone number is (571) 272-7937. The examiner can normally be reached on Mon-Fri 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine Yu can be reached on (571) 272-4835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

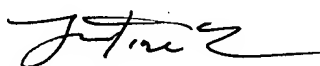
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

Art Unit: 3771

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Amadeus S Lopez  
Examiner  
Art Unit 3771  
February 21, 2007

ASL

  
JUSTINE R. YU  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700  
2/21/07